Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Complex Clinical Cases

TRIGGERED BY COVID OR INEVITABLE: A CASE OF COVID RELATED AORTIC DISSECTION IN MARFAN'S SYNDROME

Poster Contributions
Sunday, May 16, 2021, 1:15 p.m.-2:00 p.m.

Session Title: Complex Clinical Cases: FIT Covid-19 2
Abstract Category: FIT: Coronavirus Disease (COVID-19)

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Background: Aortic dissection is the most common cause of premature death in Marfan's syndrome. Case reports have linked aortic dissection to the novel coronavirus. Evidence shows an increased rate of aortic dissection during flu season. Clinical suspicion and rapid diagnosis of aortic dissection are vital for patient survival.

Case: A 17-year-old male with marfanoid appearance and a family history of aortic dissection presented with substernal chest pain. He was diagnosed with COVID-19 infection two weeks prior. His vitals were stable on admission with an elevated d-dimer. Computed tomography with angiography revealed Type A aortic dissection and fusiform aneurysm (8.8cm) of the ascending aorta.

Decision-making: The patient met clinical diagnostic criteria for Marfan syndrome. His elevated d-dimer and symptoms prompted evaluation with CTA. The decision was made for emergent surgery. A high index of suspicion for aortic dissection is crucial in patients with marfanoid features. Multimodality imaging with chest x-ray, CTA, and transesophageal imaging was used during this patient's diagnosis and treatment.

Conclusion: This is the first case of a patient with the novel coronavirus and Marfan's with aortic dissection. The link between aortic dissection and the novel coronavirus remains unanswered. Theories include increased sympathetic activity, immune-mediated injury, and inflammation. It is imperative to be aware of this potential complication in Marfan patients diagnosed with the COVID-19.